



MAJOR SOURCE OPERATING PERMIT

Permittee: **IIG MinWool LLC**
Facility Name: **IIG MinWool LLC**
Facility No.: 211-0013
Location: Phenix City, Alabama

In accordance with and subject to the provisions of the Alabama Air Pollution Control Act of 1971, as amended, Ala. Code §§22-28-1 to 22-28-23 (2006 Rplc. Vol. and 2007 Cum. Supp.) (the "AAPCA") and the Alabama Environmental Management Act, as amended, Ala. Code §§22-22A-1 to 22-22A-15 (2006 Rplc. Vol. and 2007 Cum. Supp.), and rules and regulations adopted thereunder, and subject further to the conditions set forth in this permit, the Permittee is hereby authorized to construct, install and use the equipment, device or other article described above.

*Pursuant to the **Clean Air Act of 1990**, all conditions of this permit are federally enforceable by EPA, the Alabama Department of Environmental Management, and citizens in general. Those provisions which are not required under the **Clean Air Act of 1990** are considered to be state permit provisions and are not federally enforceable by EPA and citizens in general. Those provisions are contained in separate sections of this permit.*

Issuance Date: *October 15, 2013*
Modification Date: *DRAFT*
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Alabama Department of Environmental Management

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<p>1. <u>Transfer</u></p> <p>This permit is not transferable, whether by operation of law or otherwise, either from one location to another, from one piece of equipment to another, or from one person to another, except as provided in ADEM Admin. Code R. 335-3-16-.13(1)(a)5.</p> <p>2. <u>Renewals</u></p> <p>An application for permit renewal shall be submitted at least six (6) months, but not more than eighteen (18) months, before the date of expiration of this permit.</p> <p>The source for which this permit is issued shall lose its right to operate upon the expiration of this permit unless a timely and complete renewal application has been submitted within the time constraints listed in the previous paragraph.</p> <p>3. <u>Severability Clause</u></p> <p>The provisions of this permit are declared to be severable and if any section, paragraph, subparagraph, subdivision, clause, or phrase of this permit shall be adjudged to be invalid or unconstitutional by any court of competent jurisdiction, the judgment shall not affect, impair, or invalidate the remainder of this permit, but shall be confined in its operation to the section, paragraph, subparagraph, subdivision, clause, or phrase of this permit that shall be directly involved in the controversy in which such judgment shall have been rendered.</p> <p>4. <u>Compliance</u></p> <p>(a) The permittee shall comply with all conditions of ADEM Admin. Code 335-3. Noncompliance with this permit will constitute a violation of the Clean Air Act of 1990 and ADEM Admin. Code 335-3 and may result in an enforcement action; including but not limited to, permit termination, revocation and reissuance, or modification; or denial of a permit renewal application by the permittee.</p>	<p>ADEM Admin. Code R. 335-3-16-.02(6)</p> <p>ADEM Admin. Code R. 335-3-16-.12(2)</p> <p>ADEM Admin. Code R. 335-3-16-.05(e)</p> <p>ADEM Admin. Code R. 335-3-16-.05(f)</p>

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<p>(b) The permittee shall not use as a defense in an enforcement action that maintaining compliance with conditions of this permit would have required halting or reducing the permitted activity.</p>	<p>ADEM Admin. Code R. 335-3-16-.05(g)</p>
<p>5. <u>Termination for Cause</u></p> <p>This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance will not stay any permit condition.</p>	<p>ADEM Admin. Code R. 335-3-16-.05(h)</p>
<p>6. <u>Property Rights</u></p> <p>The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege.</p>	<p>ADEM Admin. Code R. 335-3-16-.05(i)</p>
<p>7. <u>Submission of Information</u></p> <p>The permittee must submit to the Department, within 30 days or for such other reasonable time as the Department may set, any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. Upon receiving a specific request, the permittee shall also furnish to the Department copies of records required to be kept by this permit.</p>	<p>ADEM Admin. Code R. 335-3-16-.05(j)</p>
<p>8. <u>Economic Incentives, Marketable Permits, and Emissions Trading</u></p> <p>No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.</p>	<p>ADEM Admin. Code R. 335-3-16-.05(k)</p>
<p>9. <u>Certification of Truth, Accuracy, and Completeness:</u></p> <p>Any application form, report, test data, monitoring data, or compliance certification submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the</p>	<p>ADEM Admin. Code R. 335-3-16-.07(a)</p>

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<p>document are true, accurate and complete.</p> <p>10. <u>Inspection and Entry</u></p> <p>Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized representatives of the Alabama Department of Environmental Management and EPA to conduct the following:</p> <ul style="list-style-type: none"> (a) Enter upon the permittee's premises where a source is located or emissions-related activity is conducted, or where records must be kept pursuant to the conditions of this permit; (b) Review and/or copy, at reasonable times, any records that must be kept pursuant to the conditions of this permit; (c) Inspect, at reasonable times, this facility's equipment (including monitoring equipment and air pollution control equipment), practices, or operations regulated or required pursuant to this permit; (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or other applicable requirements. 	<p>ADEM Admin. Code R. 335-3-16-.07(b)</p>
<p>11. <u>Compliance Provisions</u></p> <ul style="list-style-type: none"> (a) The permittee shall continue to comply with the applicable requirements with which the company has certified that it is already in compliance. (b) The permittee shall comply in a timely manner with applicable requirements that become effective during the term of this permit. 	<p>ADEM Admin. Code R. 335-3-16-.07(c)</p>
<p>12. <u>Compliance Certification</u></p> <p>A compliance certification shall be submitted on or before November 30th of each calendar year and shall cover the period between October 1st of the previous year and September 30th of the current year.</p> <ul style="list-style-type: none"> (a) The compliance certification shall include the following: <ul style="list-style-type: none"> (1) The identification of each term or condition of this permit that is the basis of the certification; 	<p>ADEM Admin. Code R. 335-3-16-.07(e)</p>

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<p>(2) The compliance status;</p> <p>(3) The method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with ADEM Admin. Code R. 335-3-16-.05(c) (Monitoring and Recordkeeping Requirements);</p> <p>(4) Whether compliance has been continuous or intermittent;</p> <p>(5) Such other facts as the Department may require to determine the compliance status of the source;</p> <p>(b) The compliance certification shall be submitted to:</p> <p style="padding-left: 40px;">Alabama Department of Environmental Management Air Division P.O. Box 301463 Montgomery, AL 36130-1463</p> <p style="padding-left: 80px;">and to:</p> <p style="padding-left: 40px;">Air and EPCRA Enforcement Branch EPA Region IV 61 Forsyth Street, SW Atlanta, GA 30303</p>	
<p>13. <u>Reopening for Cause</u></p> <p>Under any of the following circumstances, this permit will be reopened prior to the expiration of the permit:</p> <p>(a) Additional applicable requirements under the Clean Air Act of 1990 become applicable to the permittee with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which this permit is due to expire.</p> <p>(b) Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans</p>	<p>ADEM Admin. Code R. 335-3-16-.13(5)</p>

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<p>shall be deemed to be incorporated into this permit.</p> <p>(c) The Department or EPA determines that this permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit.</p> <p>(d) The Administrator or the Department determines that this permit must be revised or revoked to assure compliance with the applicable requirements.</p>	
<p>14. <u>Additional ADEM Admin. Code R.s and Regulations</u></p> <p>This permit is issued on the basis of ADEM Admin. Code R.s and Regulations existing on the date of issuance. In the event additional ADEM Admin. Code R.s and Regulations are adopted, it shall be the permit holder's responsibility to comply with such ADEM Admin. Code R.s.</p>	<p>§22-28-16(d), Code of Alabama 1975, as amended</p>
<p>15. <u>Equipment Maintenance or Breakdown</u></p> <p>(a) In the case of shutdown of air pollution control equipment (which operates pursuant to any permit issued by the Director) for necessary scheduled maintenance, the intent to shut down such equipment shall be reported to the Director at least twenty-four (24) hours prior to the planned shutdown, unless such shutdown is accompanied by the shutdown of the source which such equipment is intended to control. Such prior notice shall include, but is not limited to the following:</p> <ol style="list-style-type: none"> (1) Identification of the specific facility to be taken out of service as well as its location and permit number; (2) The expected length of time that the air pollution control equipment will be out of service; (3) The nature and quantity of emissions of air contaminants likely to occur during the shutdown period; (4) Measures such as the use of off-shift labor and equipment that will be taken to minimize the length of the shutdown period; (5) The reasons that it would be impossible or impractical to shut down the source operation 	<p>ADEM Admin. Code R. 335-3-1-.07(1), (2)</p>

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<p style="text-align: center;">during the maintenance period.</p> <p>(b) In the event that there is a breakdown of equipment or upset of process in such a manner as to cause, or is expected to cause, increased emissions of air contaminants which are above an applicable standard, the person responsible for such equipment shall notify the Director within 24 hours or the next working day and provide a statement giving all pertinent facts, including the estimated duration of the breakdown. The Director shall be notified when the breakdown has been corrected.</p>	
<p>16. <u>Operation of Capture and Control Devices</u></p> <p>All air pollution control devices and capture systems for which this permit is issued shall be maintained and operated at all times in a manner so as to minimize the emissions of air contaminants. Procedures for ensuring that the above equipment is properly operated and maintained so as to minimize the emission of air contaminants shall be established.</p>	<p>§22-28-16(d), Code of Alabama 1975, as amended</p>
<p>17. <u>Obnoxious Odors</u></p> <p>This permit is issued with the condition that, should obnoxious odors arising from the plant operations be verified by Air Division inspectors, measures to abate the odorous emissions shall be taken upon a determination by the Alabama Department of Environmental Management that these measures are technically and economically feasible.</p>	<p>ADEM Admin. Code R. 335-3-1-.08</p>
<p>18. <u>Fugitive Dust</u></p> <p>(a) Precautions shall be taken to prevent fugitive dust emanating from plant roads, grounds, stockpiles, screens, dryers, hoppers, ductwork, etc.</p> <p>(b) Plant or haul roads and grounds will be maintained in the following manner so that dust will not become airborne. A minimum of one, or a combination, of the following methods shall be utilized to minimize airborne dust from plant or haul roads and grounds:</p> <p>(1) By the application of water any time the surface of the road is sufficiently dry to allow the creation of dust emissions by the act of</p>	<p>ADEM Admin. Code R. 335-3-4-.02</p>

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<p>wind or vehicular traffic;</p> <p>(2) By reducing the speed of vehicular traffic to a point below that at which dust emissions are created;</p> <p>(3) By paving;</p> <p>(4) By the application of binders to the road surface at any time the road surface is found to allow the creation of dust emissions;</p> <p>Should one, or a combination, of the above methods fail to adequately reduce airborne dust from plant or haul roads and grounds, alternative methods shall be employed, either exclusively or in combination with one or all of the above control techniques, so that dust will not become airborne. Alternative methods shall be approved by the Department prior to utilization.</p>	
<p>19. <u>Additions and Revisions</u></p> <p>Any modifications to this source shall comply with the modification procedures in ADEM Admin. Code R.s 335-3-16-.13 or 335-3-16-.14.</p>	<p>ADEM Admin. Code R. 335-3-16-.13 and .14</p>
<p>20. <u>Recordkeeping Requirements</u></p> <p>(a) Records of required monitoring information of the source shall include the following:</p> <p>(1) The date, place, and time of all sampling or measurements;</p> <p>(2) The date analyses were performed;</p> <p>(3) The company or entity that performed the analyses;</p> <p>(4) The analytical techniques or methods used;</p> <p>(5) The results of all analyses; and</p> <p>(6) The operating conditions that existed at the time of sampling or measurement.</p>	<p>ADEM Admin. Code R. 335-3-16-.05(c)2.</p>

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<p>(b) Retention of records of all required monitoring data and support information of the source for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation and copies of all reports required by the permit.</p> <p>21. <u>Reporting Requirements</u></p> <p>(a) Reports to the Department of any required monitoring shall be submitted at least every 6 months. All instances of deviations from permit requirements must be clearly identified in said reports. All required reports must be certified by a responsible official consistent with ADEM Admin. Code R. 335-3-16-.04(9).</p> <p>(b) Deviations from permit requirements shall be reported within 48 hours or 2 working day of such deviations, including those attributable to upset conditions as defined in the permit. The report will include the probable cause of said deviations, and any corrective actions or preventive measures that were taken.</p> <p>22. <u>Emission Testing Requirements</u></p> <p>Each point of emission which requires testing will be provided with sampling ports, ladders, platforms, and other safety equipment to facilitate testing performed in accordance with procedures established by Part 60 of Title 40 of the Code of Federal Regulations, as the same may be amended or revised.</p> <p>The Air Division must be notified in writing at least 10 days in advance of all emission tests to be conducted and submitted as proof of compliance with the Department's air pollution control ADEM Admin. Code R.s and regulations.</p> <p>To avoid problems concerning testing methods and procedures, the following shall be included with the</p>	<p></p> <p>ADEM Admin. Code R. 335-3-16-.05(c)3.</p> <p>ADEM Admin. Code R. 335-3-1-.05(3) and ADEM Admin. Code R. 335-3-1-.04(1)</p>

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<p>notification letter:</p> <ol style="list-style-type: none"> (1) The date the test crew is expected to arrive, the date and time anticipated of the start of the first run, how many and which sources are to be tested, and the names of the persons and/or testing company that will conduct the tests. (2) A complete description of each sampling train to be used, including type of media used in determining gas stream components, type of probe lining, type of filter media, and probe cleaning method and solvent to be used (if test procedures require probe cleaning). (3) A description of the process(es) to be tested including the feed rate, any operating parameters used to control or influence the operations, and the rated capacity. (4) A sketch or sketches showing sampling point locations and their relative positions to the nearest upstream and downstream gas flow disturbances. <p>A pretest meeting may be held at the request of the source owner or the Air Division. The necessity for such a meeting and the required attendees will be determined on a case-by-case basis.</p> <p>All test reports must be submitted to the Air Division within 30 days of the actual completion of the test unless an extension of time is specifically approved by the Air Division.</p>	<p>ADEM Admin. Code R. 335-3-1-.04</p>
<p>23. <u>Payment of Emission Fees</u></p> <p>Annual emission fees shall be remitted each year according to the fee schedule in ADEM Admin. Code R. 335-1-7-.04.</p>	<p>ADEM Admin. Code R. 335-1-7-.04</p>
<p>24. <u>Other Reporting and Testing Requirements</u></p> <p>Submission of other reports regarding monitoring records, fuel analyses, operating rates, and equipment malfunctions may be required as authorized in the Department's air pollution control ADEM Admin. Code R.s and regulations. The Department may require emission testing at any time.</p>	<p>ADEM Admin. Code R. 335-3-1-.04(1)</p>

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<p>25. <u>Title VI Requirements (Refrigerants)</u></p> <p>Any facility having appliances or refrigeration equipment, including air conditioning equipment, which use Class I or Class II ozone-depleting substances as listed in 40 CFR Part 82, Subpart A, Appendices A and B, shall service, repair, and maintain such equipment according to the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40 CFR Part 82, Subpart F.</p> <p>No person shall knowingly vent or otherwise release any Class I or Class II substance into the environment during the repair, servicing, maintenance, or disposal of any device except as provided in 40 CFR Part 82, Subpart F.</p> <p>The responsible official shall comply with all reporting and recordkeeping requirements of 40 CFR 82.166. Reports shall be submitted to the US EPA and the Department as required.</p> <p>26. <u>Chemical Accidental Prevention Provisions</u></p> <p>If a chemical listed in Table 1 of 40 CFR Part 68.130 is present in a process in quantities greater than the threshold quantity listed in Table 1, then:</p> <ul style="list-style-type: none"> (a) The owner or operator shall comply with the provisions in 40 CFR Part 68. (b) The owner or operator shall submit one of the following: <ul style="list-style-type: none"> (1) A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR Part 68 § 68.10(a) or, (2) A certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the Risk Management Plan. <p>27. <u>Display of Permit</u></p> <p>This permit shall be kept under file or on display at all times at the site where the facility for which the permit is issued is located and will be made readily available for inspection by</p>	<p>40 CFR 82</p> <p>40 CFR Part 68</p> <p>ADEM Admin. Code R. 335-3-14-.01(1)(d)</p>

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any or all persons who may request to see it.	
<p>28. <u>Circumvention</u></p> <p>No person shall cause or permit the installation or use of any device or any means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes any emission of air contaminant which would otherwise violate the Division 3 ADEM Admin. Code R.s and regulations.</p>	<p>ADEM Admin. Code R. 335-3-1-.10</p>
<p>29. <u>Visible Emissions</u></p> <p>Unless otherwise specified in the Unit Specific provisos of this permit, any source of particulate emissions shall not discharge more than one 6-minute average opacity greater than 20% in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate emissions greater than 40%. Opacity will be determined by 40 CFR Part 60, Appendix A, Method 9, unless otherwise specified in the Unit Specific provisos of this permit.</p>	<p>ADEM Admin. Code R. 335-3-4-.01(1)</p>
<p>30. <u>Fuel-Burning Equipment</u></p> <p>(a) Unless otherwise specified in the Unit Specific provisos of this permit, no fuel-burning equipment may discharge particulate emissions in excess of the emissions specified in Part 335-3-4-.03.</p> <p>(b) Unless otherwise specified in the Unit Specific provisos of this permit, no fuel-burning equipment may discharge sulfur dioxide emissions in excess of the emissions specified in Part 335-3-5-.01.</p>	<p>ADEM Admin. Code R. 335-3-4-.03</p> <p>ADEM Admin. Code R. 335-3-5-.01</p>
<p>31. <u>Process Industries – General</u></p> <p>Unless otherwise specified in the Unit Specific provisos of this permit, no process may discharge particulate emissions in excess of the emissions specified in Part 335-3-4-.04.</p>	<p>ADEM Admin. Code R. 335-3-4-.04</p>
<p>32. <u>Averaging Time for Emission Limits</u></p> <p>Unless otherwise specified in the permit, the averaging time for the emission limits listed in this permit shall be the</p>	<p>ADEM Admin. Code R.</p>

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nominal time required by the specific test method.	335-3-1-.05
<p>33. <u>Compliance Assurance Monitoring (CAM)</u></p> <p>Conditions (a) through (d) that follow are general conditions applicable to emissions units that are subject to the CAM requirements. Specific requirements related to each emissions unit are contained in the unit specific provisos and the attached CAM appendices.</p> <p>(a) <u>Operation of Approved Monitoring</u></p> <p>(1) <i>Commencement of operation.</i> The owner or operator shall conduct the monitoring required under this section and detailed in the unit specific provisos and CAM appendix of this permit (if required) upon issuance of the permit, or by such later date specified in the permit pursuant to §64.6(d).</p> <p>(2) <i>Proper maintenance.</i> At all times, the owner or operator shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.</p> <p>(3) <i>Continued operation.</i> Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation</p>	<p>40 CFR 64</p> <p>40 CFR 64.7</p>

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<p>are not malfunctions.</p> <p>(4) <i>Response to excursions or exceedances.</i> (a) Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable. (b) Determination of whether the owner or operator has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.</p> <p>(5) <i>Documentation of need for improved monitoring.</i> After approval of monitoring under this part, if the owner or operator identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the owner or operator shall promptly notify the Department and, if necessary, submit a proposed modification to the permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of</p>	

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<p>conducting monitoring and collecting data, or the monitoring of additional parameters.</p> <p>(b) Quality Improvement Plan (QIP) Requirements</p> <p>(1) Based on the results of a determination made under Section 33(a)(4)(b) above, the Administrator or the permitting authority may require the owner or operator to develop and implement a QIP. Consistent with 40 CFR §64.6(c)(3), the permit may specify an appropriate threshold, such as an accumulation of exceedances or excursions exceeding 5 percent duration of a pollutant-specific emissions unit's operating time for a reporting period, for requiring the implementation of a QIP. The threshold may be set at a higher or lower percent or may rely on other criteria for purposes of indicating whether a pollutant-specific emissions unit is being maintained and operated in a manner consistent with good air pollution control practices.</p> <p>(2) Elements of a QIP:</p> <ul style="list-style-type: none"> (a) The owner or operator shall maintain a written QIP, if required, and have it available for inspection. (b) The plan initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the owner or operator shall modify the plan to include procedures for conducting one or more of the following actions, as appropriate: <ul style="list-style-type: none"> i. Improved preventive maintenance practices. ii. Process operation changes. iii. Appropriate improvements to control methods. iv. Other steps appropriate to correct control performance. v. More frequent or improved monitoring (only in conjunction with one or more steps under paragraphs (2)(b)(i) through (iv) above). 	<p>40 CFR 64.8</p>

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<p>(3) If a QIP is required, the owner or operator shall develop and implement a QIP as expeditiously as practicable and shall notify the Department if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.</p> <p>(4) Following implementation of a QIP, upon any subsequent determination pursuant to Section 33(a)(4)(b) above, the Department may require that an owner or operator make reasonable changes to the QIP if the QIP is found to have:</p> <ul style="list-style-type: none"> (a) Failed to address the cause of the control device performance problems; or (b) Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. <p>(5) Implementation of a QIP shall not excuse the owner or operator of a source from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act.</p>	
<p>(c) Reporting and Recordkeeping Requirements</p> <p>(1) <i>General reporting requirements</i></p> <ul style="list-style-type: none"> (a) On and after the date specified in Section 33(a)(1) above by which the owner or operator must use monitoring that meets the requirements of this part, the owner or operator shall submit monitoring reports to the permitting authority in accordance with ADEM Admin. Code R. 335-3-16-.05(c)3. (b) A report for monitoring under this part shall include, at a minimum, the information required under ADEM Admin. Code R. 335-3-16-.05(c)3. and the following information, as applicable: 	<p>40 CFR 64.9</p>

General Permit Provisos

Federally Enforceable Provisos	Regulations
<ul style="list-style-type: none"> i. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken; ii. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and iii. A description of the actions taken to implement a QIP during the reporting period as specified in Section 33(b) above. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring. <p>(2) General recordkeeping requirements.</p> <ul style="list-style-type: none"> (a) The owner or operator shall comply with the recordkeeping requirements specified in ADEM Admin. Code R. 335-3-16-.05(c)2.. The owner or operator shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to Section 33(b) above and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions). (b) Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. 	

General Permit Provisos

Federally Enforceable Provisos	Regulations
<p data-bbox="240 363 571 394">(d) Savings Provisions</p> <p data-bbox="289 426 703 457">(1) Nothing in this part shall:</p> <ul style="list-style-type: none"> <li data-bbox="289 499 1101 1077">a. Excuse the owner or operator of a source from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act. The requirements of this part shall not be used to justify the approval of monitoring less stringent than the monitoring which is required under separate legal authority and are not intended to establish minimum requirements for the purpose of determining the monitoring to be imposed under separate authority under the Act, including monitoring in permits issued pursuant to title I of the Act. The purpose of this part is to require, as part of the issuance of a permit under title V of the Act, improved or new monitoring at those emissions units where monitoring requirements do not exist or are inadequate to meet the requirements of this part. <li data-bbox="289 1098 1084 1329">b. Restrict or abrogate the authority of the Department to impose additional or more stringent monitoring, recordkeeping, testing, or reporting requirements on any owner or operator of a source under any provision of the Act, including but not limited to sections 114(a)(1) and 504(b), or state law, as applicable. <li data-bbox="289 1371 1092 1497">c. Restrict or abrogate the authority of the Department to take any enforcement action under the Act for any violation of an applicable requirement or of any person to take action under section 304 of the Act. 	<p data-bbox="1138 363 1336 394">40 CFR 64.10</p>

Summary Page for #1 Mineral Wool Cupola Furnace and Fiber Formation Collection Process

Permitted Operating Schedule: 24 Hrs/day x 7 Days/week x 52 Weeks/yr = 8760 Hrs/yr

Emission limitations:

Emission Point #	Description	Pollutant	Emission limit	Regulation
Stack 101	Environtech #1, Filterhouse #1	PM	117 lb/hr*	335-3-14-.04(9) BACT
Stack 101	Environtech #1, Filterhouse #1	CO	16.7 lb/hr**	335-3-14-.04(9) BACT
Stack 101	Environtech #1, Filterhouse #1	NO _x	15.0 lb/hr**	335-3-14-.04(9) BACT
Stack 101	Environtech #1, Filterhouse #1	H ₂ S	1.0 lb/hr**	335-3-14-.04(9) BACT
Stack 101	Environtech #1, Filterhouse #1	SO ₂	88.5 lb/hr**	335-3-14-.04(9) BACT
Stack 101	Environtech #1, Filterhouse #1	PM	0.1 lb/ton of melt **	§63.1178(a)(1) Subpart DDD

* combined particulate matter (PM) emissions from the Cupola, Fiber Formation/Collection Process, Mineral Wool Process (Board Line), and Mineral Wool Process (Pipe Insulation Line)

**Limits associated with only the cupola furnace

Provisos for #1 Mineral Wool Cupola Furnace and Fiber Formation Collection Process

Federally Enforceable Provisos	Regulations
<u>Applicability</u>	
1. The cupola furnace and fiber collection are subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, <i>"Major Source Operating Permits"</i> .	ADEM Admin. Code R. 335-3-16-.03
2. The cupola furnace and fiber collection are subject to ADEM Admin. Code R. 335-3-4-.01(1), <i>"Control of Particulate Emissions – Visible Emissions"</i>	ADEM Admin. Code R. 335-3-4-.01(1)
3. The cupola furnace has enforceable limits in place in order to comply with the applicable provisions of ADEM Admin. Code R. 335-3-14-.04, <i>"Air Permits Authorizing Construction in Clean Air Areas [Prevention of Significant Deterioration]"</i> .	ADEM Admin. Code R. 335-3-14-.04
4. The cupola is subject to the applicable requirements of 40 CFR 63 Subpart DDD, <i>"National Emission Standards for Hazardous Air Pollutants for Mineral Wool Production"</i> .	ADEM Admin. Code R. 335-3-11-.06(55) [§ 63.1178]
5. The cupola is subject to the applicable requirements of 40 CFR 63 Subpart A, <i>"General Provisions"</i> , as listed in Table 1 in Subpart DDD in 40 CFR Part 63.	ADEM Admin. Code R. 335-3-11-.06(55) [§ 63.1178]
6. This cupola is subject to 40 CFR 64, <i>"Compliance Assurance Monitoring."</i> Pre-control potential carbon monoxide emissions exceed 100 TPY.	40 CFR Part 64
<u>Emission Standards</u>	
1. Visible emissions (VE) these units shall not exceed the opacity limitations as specified in General Proviso No. 29.	ADEM Admin. Code R. 335-3-4-.01(1)
2. The combined particulate matter (PM) emissions from the Cupola, Fiber Formation/Collection Process, Mineral Wool Process (Board Line), and Mineral Wool Process (Pipe Insulation Line) shall not exceed 117.0 (lb/hr) pounds per hour.	ADEM Admin. Code R. 335-3-14-.04(9) BACT
3. Particulate matter (PM) emissions from each existing, new, or reconstructed cupola shall not exceed 0.05 kilograms (kg) of PM per megagram (MG) (0.10 pound [lb] of PM per ton) of melt.	ADEM Admin. Code R. 335-3-11-.06(55) [§63.1178(a)(1)]
4. The Permittee must comply with these standards (Subpart DDD) at all times except during periods of startup, shutdown, or malfunction.	ADEM Admin. Code R. 335-3-11-.06(55) [§63.1180]

Federally Enforceable Provisos	Regulations
5. The pressure drop across each baghouse shall not drop below 0.2 inches W. C. while the source of pollution to the baghouse is operating.	ADEM Admin. Code R. 335-3-14-.04(9) BACT
6. The three-hour average temperature in the firebox of the thermal oxidizer on the cupola shall not be less than 1320°F while the cupola is operating.	ADEM Admin. Code R. 335-3-14-.04(9) BACT
7. Sulfur dioxide emissions from the #1 cupola shall not exceed 88.5 pounds per hour.	ADEM Admin. Code R. 335-3-14-.04(9) BACT
8. Carbon monoxide emissions from the #1 cupola shall not exceed 16.7 pounds per hour.	ADEM Admin. Code R. 335-3-14-.04(9) BACT
9. Nitrogen oxides emissions from the #1 cupola shall not exceed 15.0 pounds per hour.	ADEM Admin. Code R. 335-3-14-.04(9) BACT
10. Hydrogen sulfide emissions from the #1 cupola shall not exceed 1.0 pounds per hour.	ADEM Admin. Code R. 335-3-14-.04(9) BACT
11. Only coke derived from coal shall be used as fuel. Such coke shall not contain sulfur which exceeds 0.7% by weight.	ADEM Admin. Code R. 335-3-14-.04(9) BACT
12. The cupola shall be vented to a baghouse and an incinerator in series.	ADEM Admin. Code R. 335-3-14-.04(9) BACT
13. The baghouse and incinerator shall not be bypassed during startup or for more than 4 hours during shutdown periods.	ADEM Admin. Code R. 335-3-14-.04(9) BACT
14. Begin within one hour after the alarm on a bag leak detection system sounds, and complete in a timely manner, corrective actions as specified in your operations, maintenance, and monitoring plan required by §63.1187 of 40 CFR 63 Subpart DDD.	ADEM Admin. Code R. 335-3-11-.06(55) [§63.1178(b)(1)]
15. When the alarm on a bag leak detection system sounds for more than five percent of the total operating time in a six-month reporting period, develop and implement a written quality improvement plan (QIP) consistent with the compliance assurance monitoring requirements of §64.8(b)-(d) of 40 CFR part 64.	ADEM Admin. Code R. 335-3-11-.06(55) [§63.1178(b)(2)]

Federally Enforceable Provisos	Regulations
<u>Compliance and Performance Test Methods and Procedures</u>	
1. If testing is required, the nitrogen oxide (NO _x) emissions shall be determined by Methods 7, 7a, 7b, or 7e of 40 CFR 60, Appendix A.	ADEM Admin. Code R. 335-3-1-.05
2. If testing is required, the carbon monoxide (CO) emissions shall be determined by Methods 10 or 10b of 40 CFR 60, Appendix A.	ADEM Admin. Code R. 335-3-1-.05
3. If testing is required, particulate matter emissions shall be determined by Method 5e of 40 CFR Part 60, Appendix A.	ADEM Admin. Code R. 335-3-1-.05
4. If testing is required, the hydrogen sulfide emissions shall be determined by Method 11 of 40 CFR Part 60, Appendix A.	ADEM Admin. Code R. 335-3-1-.05
5. If testing is required, sulfur dioxide emissions shall be determined by Methods 6 or 6c of 40 CFR Part 60, Appendix A.	ADEM Admin. Code R. 335-3-1-.05
6. To comply with the PM standards of Subpart DDD, you must meet all of the following: (a) Install, adjust, maintain, and continuously operate a bag leak detection system for each fabric filter. (b) Do a performance test as specified in §63.1188 of this subpart and show compliance with the PM emission limits while the bag leak detection system is installed, operational, and properly adjusted. (c) Begin corrective actions specified in your operations, maintenance, and monitoring plan required by §63.1187 of this subpart within one hour after the alarm on a bag leak detection system sounds. Complete the corrective actions in a timely manner. (d) Develop and implement a written QIP consistent with compliance assurance monitoring requirements of 40 CFR 64.8(b) through (d) when the alarm on a bag leak detection system sounds for more than five percent of the total operating time in a six-month reporting period.	ADEM Admin. Code R. 335-3-11-.06(55) [§63.1181]
7. The performance tests conducted to demonstrate compliance with the emissions limits in §63.1178 shall conform to the test methods and procedures specified in §63.1188 and §63.1189.	ADEM Admin. Code R. 335-3-11-.06(55) [§63.1188-1189]

Federally Enforceable Provisos	Regulations
<p>8. Using the results of the performance tests, the facility must use the following equation to determine compliance with the PM emission limit:</p> $E = \frac{C \times Q \times K_1}{P}$ <p>where:</p> <p>E = Emission rate of PM, kg/Mg (lb/ton) of melt. C = Concentration of PM, g/dscm (gr/dscf). Q = Volumetric flow rate of exhaust gases, dscm/hr (dscf/hr). K₁ = Conversion factor, 1 kg/1,000 g (1 lb/7,000 gr). P = Average melt rate, Mg/hr (ton/hr).</p>	<p>ADEM Admin. Code R. 335-3-11-.06(55) [§63.1190]</p>
<p><u>Emission Monitoring</u></p>	
<p>1. Carbon Monoxide emission monitoring requirements under 40 CFR Part 64, “<i>Compliance Assurance Monitoring</i>” can be found in Appendix A.</p>	<p>40 CFR Part 64</p>
<p>2. A monitoring device that continuously measures and records the firebox temperature of the incinerator on the cupola shall be installed, calibrated, maintained, and operated.</p>	<p>ADEM Admin. Code R. 335-3-1-.04</p>
<p>3. Instruments which measure the pressure drop across the filterhouses shall be maintained and operated.</p>	<p>ADEM Admin. Code R. 335-3-1-.04</p>
<p>4. Pressure drop across each filterhouse shall be monitored and recorded daily, except when the source of pollution to the filterhouse is not being operated.</p>	<p>ADEM Admin. Code R. 335-3-1-.04</p>
<p>5. Emissions tests on Stack 101 are to be conducted for the following pollutants at intervals not to exceed one year following the date of previous compliance testing. All test reports must be submitted to the Department within 15 days of completion of testing.</p>	<p>ADEM Admin. Code R. 335-3-1-.04</p>
<p>Particulate <input checked="" type="checkbox"/> Carbon Monoxide <input checked="" type="checkbox"/> Sulfur Dioxide <input checked="" type="checkbox"/></p>	
<p>6. A bag leak detection system must meet the following requirements:</p>	<p>ADEM Admin. Code R. 335-3-11-.06(55) [§63.1184]</p>

Federally Enforceable Provisos	Regulations
<ul style="list-style-type: none"> (a) The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less. (b) The sensor on the bag leak detection system must provide output of relative PM emissions. (c) The bag leak detection system must have an alarm that will sound automatically when it detects an increase in relative PM emissions greater than a preset level. (d) The alarm must be located in an area where appropriate plant personnel will be able to hear it. (e) For a positive-pressure fabric filter, each compartment or cell must have a bag leak detector. For a negative-pressure or induced-air fabric filter, the bag leak detector must be installed downstream of the fabric filter. If multiple bag leak detectors are required (for either type of fabric filter), detectors may share the system instrumentation and alarm. (f) Each triboelectric bag leak detection system must be installed, operated, adjusted, and maintained so that it follows EPA's "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015, September 1997). Other bag leak detection systems must be installed, operated, adjusted, and maintained so that they follow the manufacturer's written specifications and recommendations. (g) At a minimum, initial adjustment of the system must consist of establishing the baseline output in both of the following ways: <ul style="list-style-type: none"> (1) Adjust the range and the averaging period of the device. (2) Establish the alarm set points and the alarm delay time. 	

Federally Enforceable Provisos	Regulations
<p>(h) After initial adjustment, the range, averaging period, alarm set points, or alarm delay time may not be adjusted except as specified in the operations, maintenance, and monitoring plan required by Sec. 63.1187 of this subpart. In no event may the range be increased by more than 100 percent or decreased by more than 50 percent over a 365 day period unless a responsible official as defined in Sec. 63.2 of the general provisions in subpart A of this part certifies in writing to the Administrator that the fabric filter has been inspected and found to be in good operating condition</p> <p>7. The facility may change control device and process operating parameter levels established during performance tests and used to monitor compliance if you do the following:</p> <p>(a) The facility must notify the Administrator of your desire to expand the range of a control device or process operating parameter level.</p> <p>(b) Upon approval from the Administrator, the facility must conduct additional performance tests at the proposed new control device or process operating parameter levels. Before operating at these levels, the performance test results must verify that, at the new levels, the facility comply with the emission limits in §§63.1178 and 63.1179 of subpart DDD.</p> <p>8. The operations, maintenance, and monitoring plan must include the following:</p> <p>(a) Process and control device parameters the facility will monitor to determine compliance, along with established operating levels or ranges for each process or control device.</p> <p>(b) A monitoring schedule.</p> <p>(c) Procedures for properly operating and maintaining control devices used to meet the standards in §§63.1178 and 63.1179 of this subpart. These procedures must include an inspection of each incinerator at least once per year. At a minimum, the facility must do the following as part of an incinerator inspection:</p>	<p>ADEM Admin. Code R. 335-3-11-.06(55) [§63.1186]</p> <p>ADEM Admin. Code R. 335-3-11-.06(55) [§63.1187(b)]</p>

Federally Enforceable Provisos	Regulations
<ul style="list-style-type: none"> (1) Inspect all burners, pilot assemblies, and pilot sensing devices for proper operation. Clean pilot sensor if necessary. (2) Ensure proper adjustment of combustion air, and adjust if necessary. (3) Inspect, when possible, all internal structures (such as baffles) to ensure structural integrity per the design specifications. (4) Inspect dampers, fans, and blowers for proper operation. (5) Inspect motors for proper operation. (6) Inspect, when possible, combustion chamber refractory lining. Clean, and repair or replace lining if necessary. (7) Inspect incinerator shell for proper sealing, corrosion, and/or hot spots. (8) For the burn cycle that follows the inspection, document that the incinerator is operating properly and make any necessary adjustments. (9) Generally observe whether the equipment is maintained in good operating condition. (10) Complete all necessary repairs as soon as practicable. (d) Procedures for keeping records to document compliance. (e) Corrective actions the facility will take if process or control device parameters vary from the levels established during performance testing. 	
<p><u>Recordkeeping and Reporting Requirements</u></p>	
<ul style="list-style-type: none"> 1. Records shall be maintained of the sulfur content of the coke used in the cupola. 	<p>ADEM Admin. Code R. 335-3-1-.04</p>

Federally Enforceable Provisos**Regulations**

2. A semi-annual monitoring report shall be submitted to the Department according the following schedule:

Reporting Period	Due Date
<i>April 1st to September 30^h</i>	<i>November 30th</i>
<i>October 1st to March 31st</i>	<i>May 30th</i>

3. A report shall be submitted semi-annually which contains the following:

- (a) The periods when firebox temperature in the incinerator on the cupola was below 1320°F and the corrective action taken.
- (b) The periods when the pressure drops across the filterhouses were below the allowable minimum pressure.

4. All record shall be maintained for a minimum of 5 years.

5. This source shall comply with the notification requirements specified in 63.1191.

6. The facility must meet the following recordkeeping requirements:

- (a) Maintain files of all information required by §63.10(b) of the general provisions in subpart A of this part, including all notifications and reports.
- (b) Maintain records of the following information also:
 - (1) Cupola production (melt) rate (Mg/hr (tons/hr) of melt).
 - (2) All bag leak detection system alarms. Include the date and time of the alarm, when corrective actions were initiated, the cause of the alarm, an explanation of the corrective actions taken, and when the cause of the alarm was corrected.

ADEM Admin. Code
335-3-16-.05(c)(3)

ADEM Admin. Code R.
335-3-16-.05(c)

ADEM Admin. Code R.
335-3-16-.05(c)2.(ii)

ADEM Admin. Code R.
335-3-11-.06(55)
[§63.1191]

ADEM Admin. Code R.
335-3-11-.06(55)
[§63.1192]

Federally Enforceable Provisos	Regulations
<p>(3) Incinerator operating temperature and results of incinerator inspections. For all periods when the average temperature in any three-hour block period fell below the average temperature established during the performance test, and all periods when the inspection identified incinerator components in need of repair or maintenance, include the date and time of the problem, when corrective actions were initiated, the cause of the problem, an explanation of the corrective actions taken, and when the cause of the problem was corrected.</p> <p>(c) Retain each record for at least five years following the date of each occurrence, measurement, corrective action, maintenance, record, or report. The most recent two years of records must be retained at the facility. The remaining three years of records may be retained off site.</p> <p>(d) Retain records on microfilm, on a computer, on computer disks, on magnetic tape disks, or on microfiche.</p> <p>(e) Report the required information on paper or on a labeled computer disk using commonly available and compatible computer software.</p> <p>7. The facility must prepare and submit reports to the Administrator as required by this subpart and §63.10 of the general provisions in subpart A of this part. These reports include, but are not limited to, the following:</p> <p>(a) A performance test report, as required by §63.10(d)(2) of the general provisions in subpart A of this part, that documents the process and control equipment operating parameters during the test period, the test methods and procedures, the analytical procedures, all calculations, and the results of the performance tests.</p> <p>(b) A startup, shutdown, and malfunction plan, as described in §63.6(e)(3) of the general provisions in subpart A of this part, that contains specific procedures for operating and maintaining the source during periods of startup, shutdown, and malfunction and a program of corrective action for malfunctioning process and control systems used to comply with the emission standards. In addition to the information required by §63.6(e)(3), the r plan must include the following:</p> <p>(1) Procedures to determine and record what caused the malfunction and when it began and ended.</p>	<p>ADEM Admin. Code R. 335-3-11-.06(55) [§63.1193]</p>

Federally Enforceable Provisos**Regulations**

- (2) Corrective actions the facility will take if a process or control device malfunctions, including procedures for recording the actions taken to correct the malfunction or minimize emissions.
- (3) An inspection and maintenance schedule for each process and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.
- (c) A report of each event as required by §63.10(b) of the general provisions in subpart A of this part, including a report if an action taken during a startup, shutdown, or malfunction is inconsistent with the procedures in the plan as described in §63.6(e)(3) of the general provisions in subpart A of this part.
- (d) An operations, maintenance, and monitoring plan as specified in §63.1187 of this subpart.
- (e) A semiannual report as required by §63.10(e)(3) of the general provisions in subpart A of this part if measured emissions exceed the applicable standard or a monitored parameter varies from the level established during performance testing. The report must contain the information specified in §63.10(c) of the general provisions, as well as the relevant records required by §63.1192(b) of this subpart.
- (f) A semiannual report stating that no excess emissions or deviations of monitored parameters occurred during the reporting period as required by §63.10(e)(3)(v) of the general provisions in subpart A of this part if no deviations have occurred.
8. Semi-annual monitoring report required by 40 CFR 63 Subpart DDD shall be submitted to the Department according to the following schedule:

ADEM Admin. Code R.
335-3-11-.06(1)
[§63.10(a)(5)]

Reporting Period	Due Date
<i>April 1st to September 30^h</i>	<i>November 30th</i>
<i>October 1st to March 31st</i>	<i>May 30th</i>

Summary Page for Mineral Wool Process – Board Line

Permitted

Operating Schedule: 24 Hrs/day x 7 Days/week x 52 Weeks/yr = 8760 Hrs/yr

Emission limitations:

Emission Point #	Description	Pollutant	Emission limit	Regulation
Stack 102	Filterhouse #3	PM	117 lb/hr*	335-3-14-.04(9) BACT
Stack 102	Filterhouse #3	CO	N/A	N/A
Stack 102	Filterhouse #3	NO _x	N/A	N/A
Stack 102	Filterhouse #3	NH ₃	N/A	N/A
Stack 102	Filterhouse #3	Formaldehyde	0.06 lb/ton of melt	§63.1179(a) Subpart DDD

***This limit is the combined particulate matter (PM) emissions from Cupola, Fiber Formation & Collection Process, Board Line, and Pipe Insulation Lines**

Provisos for Mineral Wool Process – Board Line

Federally Enforceable Provisos	Regulations
<u>Applicability</u>	
1. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, <i>“Major Source Operating Permits”</i> .	ADEM Admin. Code R. 335-3-16-.03
2. This unit is subject to ADEM Admin. Code R. 335-3-4-.01(1), <i>“Control of Particulate Emissions – Visible Emissions”</i> .	ADEM Admin. Code R. 335-3-4-.01(1)
3. This unit has enforceable limits in place in order to comply with the applicable provisions of ADEM Admin. Code R. 335-3-14-.04, <i>“Air Permits Authorizing Construction in Clean Air Areas [Prevention of Significant Deterioration]”</i> .	ADEM Admin. Code R. 335-3-14-.04
4. A mineral wool production facility is subject to the applicable provisions of 40 CFR 63 Subpart DDD, <i>“National Emission Standards for Hazardous Air Pollutants for Mineral Wool Production”</i> .	40 CFR 63 Subpart DDD
5. A mineral wool production facility is subject to the applicable provisions of 40 CFR 63 Subpart A, <i>“General Provisions”</i> as listed in Table 1 of 40 CFR 63 Subpart DDD.	40 CFR 63 Subpart DDD
<u>Emission Standards</u>	
1. Visible emissions (VE) these units shall not exceed the opacity limitations as specified in General Proviso No. 29.	ADEM Admin. Code R. 335-3-4-.01(1)
2. The combined particulate matter (PM) emissions from the Cupola, Fiber Formation/Collection Process, Mineral Wool Process (Board Line), and Mineral Wool Process (Pipe Insulation Line) shall not exceed 117.0 (lb/hr) pounds per hour.	ADEM Admin. Code R. 335-3-14-.04(9)
3. The facility must control emissions from each existing, new, or reconstructed curing oven by limiting emissions of formaldehyde to either of the following: (a) 0.03 kg of formaldehyde per MG (0.06 lb of formaldehyde per ton) of melt or less. (b) A reduction of uncontrolled formaldehyde emissions by at least 80 percent.	ADEM Admin. Code R. 335-3-11-.06(55) [§63.1179(a)]
4. The baghouse and incinerator shall not be bypassed during startup or for more than four (4) hours during shutdown periods.	ADEM Admin. Code R. 335-3-14-.04(9)

Federally Enforceable Provisos	Regulations
<ol style="list-style-type: none"> 5. The pressure drop across each baghouse shall not drop below 0.2 inches W. C. while the source of pollution to the baghouse is operating. 6. Maintain the free-formaldehyde content of each resin lot and the formaldehyde content of each binder formulation at or below the specification ranges of the resin and binder used during the performance test. 7. Maintain the operating temperature of each incinerator so that the average operating temperature for each three-hour block period never falls below the average temperature established during the performance test. 8. The Permittee must comply with these standards (Subpart DDD) at all times except during periods of startup, shutdown, or malfunction. 9. The three-hour average temperature in the firebox of the afterburner on the curing oven shall not be less than 1200°F while the curing oven is operating. 	<p>ADEM Admin. Code 335-3-14-.04(9)</p> <p>ADEM Admin. Code R. 335-3-11-.06(55) [§63.1179(b)(1)]</p> <p>ADEM Admin. Code R. 335-3-11-.06(55) [§63.1179(b)(2)]</p> <p>ADEM Admin. Code R. 335-3-11-.06(55) [§63.1180]</p> <p>ADEM Admin. Code 335-3-14-.04(9)</p>
<u>Compliance and Performance Test Methods and Procedures</u>	
<ol style="list-style-type: none"> 1. If testing is required, particulate matter emissions shall be determined by Method 5e of 40 CFR Part 60, Appendix A. 2. To comply with the formaldehyde standards, the facility must meet all of the following: <ol style="list-style-type: none"> (a) Install, calibrate, maintain, and operate a device that continuously measures the operating temperature in the firebox of each thermal incinerator. (b) Do a performance test as specified in §63.1188 of this subpart while manufacturing the product that requires a binder formulation made with the resin containing the highest free-formaldehyde content specification range. Show compliance with the formaldehyde emission limits while the device for measuring incinerator operating temperature is installed, operational, and properly calibrated. Establish the average operating temperature as specified in §63.1185(a) of this subpart. (c) During the performance test that uses the binder formulation made with the resin containing the highest free-formaldehyde content specification range, record the free-formaldehyde content specification range of the resin used, and the formulation of the binder used, including 	<p>ADEM Admin. Code R. 335-3-1-.05</p> <p>ADEM Admin. Code R. 335-3-11-.06(55) [§63.1183]</p>

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the formaldehyde content and binder specification.

- (d) Following the performance test, monitor and record the free-formaldehyde content of each resin lot and the formulation of each batch of binder used, including the formaldehyde content.
- (e) Maintain the free-formaldehyde content of each resin lot and the formaldehyde content of each binder formulation at or below the specification ranges established during the performance test.
- (f) Following the performance test, measure and record the average operating temperature of the incinerator as specified in §63.1185(b) of this subpart.
- (g) Maintain the operating temperature of the incinerator so that the average operating temperature for each three-hour block period never falls below the average temperature established during the performance test.
- (h) Operate and maintain the incinerator as specified in your operations, maintenance, and monitoring plan required by §63.1187 of this subpart.
- (i) With prior approval from the Administrator, the facility may do short-term experimental production runs using resin where the free-formaldehyde content, or binder formulations where the formaldehyde content, is higher than the specification ranges of the resin and binder used during previous performance tests, or using experimental pollution prevention process modifications without first doing additional performance tests. Notification of intent to perform a short-term experimental production run must include the following information:
 - (1) The purpose of the experimental run.
 - (2) The affected production process.
 - (3) How the resin free-formaldehyde content or binder formulation will deviate from previously approved levels or what the experimental pollution prevention process modifications are.
 - (4) The duration of the experimental run.

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<p>(5) The date and time of the experimental run.</p> <p>(6) A description of any emissions testing to be done during the experimental run.</p> <p>3. The performance tests conducted to demonstrate compliance with the emissions limits in §63.1178 shall conform to the test methods and procedures specified in §63.1188 and §63.1189.</p> <p>4. Using the results of the performance tests, the facility must use the following equation to determine compliance with the formaldehyde numerical emission limits:</p> $E = \frac{C \times MW \times O \times K_1 \times K_2}{K_3 \times P \times 10^6}$ <p>where:</p> <p>E = Emission rate of measured pollutant, kg/Mg (lb/ton) of melt.</p> <p>C = Measured volume fraction of pollutant, ppm.</p> <p>MW = Molecular weight of measured pollutant, g/g-mole:</p> <p>Formaldehyde = 30.03.</p> <p>Q = Volumetric flow rate of exhaust gases, dscm/hr (dscf/hr).</p> <p>K₁= Conversion factor, 1 kg/1,000 g (1 lb/453.6 g).</p> <p>K₂= Conversion factor, 1,000 L/m³ (28.3 L/ft³).</p> <p>K₃= Conversion factor, 24.45 L/g-mole.</p> <p>P = Average melt rate, Mg/hr (ton/hr).</p> <p><u>Emission Monitoring</u></p> <p>1. A monitoring device that continuously measures and records the firebox temperature of the afterburner on the curing oven shall be installed, calibrated, maintained, and operated.</p> <p>2. Instruments which measure the pressure drop across the filterhouses shall be maintained and operated.</p> <p>3. Pressure drop across each filterhouse shall be monitored and recorded daily, except when the source of pollution to the filterhouse is not being operated.</p>	<p>ADEM Admin. Code R. 335-3-11-.06(55) [§63.1188-1189]</p> <p>ADEM Admin. Code R. 335-3-11-.06(55) [§63.1190]</p> <p>ADEM Admin. Code 335-3-14-.04(9)</p> <p>ADEM Admin. Code 335-3-1-.04</p> <p>ADEM Admin. Code 335-3-1-.04</p>

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<p>4. An emissions test on Stack 102 is to be conducted for total PM at intervals not to exceed one year following the date of previous compliance testing. All test reports must be submitted to the Department within 15 days of completion of testing.</p>	<p>ADEM Admin. Code 335-3-1-.04</p>
<p>5. The following procedures must be done to establish the average operating temperature of the curing oven incinerator:</p> <p>(a) During the performance test, the facility must establish the average operating temperature of an incinerator as follows:</p> <p>(1) Continuously measure the operating temperature of the incinerator.</p> <p>(2) Determine and record the average temperatures in consecutive 15-minute blocks.</p> <p>(3) Determine and record the arithmetic average of the recorded average temperatures measured in consecutive 15-minute blocks for each of the one-hour performance test runs.</p> <p>(4) Determine and record the arithmetic average of the three one-hour average temperatures during the performance test runs. The average of the three one-hour performance test runs establishes the temperature level to use to monitor compliance.</p> <p>(b) To comply with the requirements for maintaining the operating temperature of an incinerator after the performance test, the facility must measure and record the average operating temperature of the incinerator as required by §§63.1182 and 63.1183 of this subpart. This average operating temperature of the incinerator is based on the arithmetic average of the one-hour average temperatures for each consecutive three-hour period and is determined in the same manner described in paragraphs (a)(1) through (a)(4) of this section.</p>	<p>ADEM Admin. Code R. 335-3-11-.06(55) [§63.1185]</p>
<p>6. The facility may change control device and process operating parameter levels established during performance tests and used to monitor compliance if you do the following:</p> <p>(a) The facility must notify the Administrator of your desire to expand the range of a control device or process operating</p>	<p>ADEM Admin. Code R. 335-3-11-.06(55) [§63.1186]</p>

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<p>parameter level.</p> <p>(b) Upon approval from the Administrator, you must conduct additional performance tests at the proposed new control device or process operating parameter levels. Before operating at these levels, the performance test results must verify that, at the new levels, you comply with the emission limits in §§63.1178 and 63.1179 of this subpart.</p> <p>7. The operations, maintenance, and monitoring plan must include the following:</p> <p>(a) Process and control device parameters you will monitor to determine compliance, along with established operating levels or ranges for each process or control device.</p> <p>(b) A monitoring schedule.</p> <p>(c) Procedures for properly operating and maintaining control devices used to meet the standards in §§63.1178 and 63.1179 of this subpart. These procedures must include an inspection of each incinerator at least once per year. At a minimum, you must do the following as part of an incinerator inspection:</p> <p>(1) Inspect all burners, pilot assemblies, and pilot sensing devices for proper operation. Clean pilot sensor if necessary.</p> <p>(2) Ensure proper adjustment of combustion air, and adjust if necessary.</p> <p>(3) Inspect, when possible, all internal structures (such as baffles) to ensure structural integrity per the design specifications.</p> <p>(4) Inspect dampers, fans, and blowers for proper operation.</p> <p>(5) Inspect motors for proper operation.</p> <p>(6) Inspect, when possible, combustion chamber refractory lining. Clean, and repair or replace lining if necessary.</p> <p>(7) Inspect incinerator shell for proper sealing, corrosion, and/or hot spots.</p>	<p>ADEM Admin. Code R. 335-3-11-.06(55) [§63.1187(b)]</p>

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- (8) For the burn cycle that follows the inspection, document that the incinerator is operating properly and make any necessary adjustments.
- (9) Generally observe whether the equipment is maintained in good operating condition.
- (10) Complete all necessary repairs as soon as practicable.
- (d) Procedures for keeping records to document compliance.
- (e) Corrective actions you will take if process or control device parameters vary from the levels established during performance testing.

Recordkeeping and Reporting Requirements

1. A semi-annual monitoring report shall be submitted to the Department according the following schedule:

Reporting Period	Due Date
<i>April 1st to September 30^h</i>	<i>November 30th</i>
<i>October 1st to March 31st</i>	<i>May 30th</i>

2. A report shall be submitted semi-annually which contains the following:
 - (a) The periods when the temperature of the afterburner on the curing oven was below 1200 °F and the corrective action take;
 - (b) The periods when the pressure drops across the filterhouses were below the minimum pressure determined during the annual stack tests;
3. All record shall be maintained for a minimum of 5 years.
4. This source shall comply with the notification requirements specified in 63.1191.
5. The facility must meet the following recordkeeping requirements:

ADEM Admin. Code R.
335-3-16-.05(c)3.

ADEM Admin. Code R.
335-3-16-.05(c)3.

ADEM Admin. Code R.
335-3-16-.05(c)3.

ADEM Admin. Code R.
335-3-11-.06(55)
[§63.1191]

ADEM Admin. Code R.
335-3-11-.06(55)
[§63.1192]

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<p>(a) Maintain files of all information required by §63.10(b) of the general provisions in subpart A of this part, including all notifications and reports.</p> <p>(b) Maintain records of the following information also:</p> <ol style="list-style-type: none"> (1) All bag leak detection system alarms. Include the date and time of the alarm, when corrective actions were initiated, the cause of the alarm, an explanation of the corrective actions taken, and when the cause of the alarm was corrected. (2) The free-formaldehyde content of each resin lot and the binder formulation, including formaldehyde content, of each binder batch used in the manufacture of bonded products. (3) Incinerator operating temperature and results of incinerator inspections. For all periods when the average temperature in any three-hour block period fell below the average temperature established during the performance test, and all periods when the inspection identified incinerator components in need of repair or maintenance, include the date and time of the problem, when corrective actions were initiated, the cause of the problem, an explanation of the corrective actions taken, and when the cause of the problem was corrected. <p>(c) Retain each record for at least five years following the date of each occurrence, measurement, corrective action, maintenance, record, or report. The most recent two years of records must be retained at the facility. The remaining three years of records may be retained off site.</p> <p>(d) Retain records on microfilm, on a computer, on computer disks, on magnetic tape disks, or on microfiche.</p> <p>(e) Report the required information on paper or on a labeled computer disk using commonly available and compatible computer software.</p> <p>6. The facility must prepare and submit reports to the Administrator as required by this subpart and §63.10 of the general provisions in subpart A of this part. These reports include, but are not limited to, the following:</p> <p>(a) A performance test report, as required by §63.10(d)(2) of</p>	<p>ADEM Admin. Code R. 335-3-11-.06(55) [§63.1193]</p>

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the general provisions in subpart A of this part, that documents the process and control equipment operating parameters during the test period, the test methods and procedures, the analytical procedures, all calculations, and the results of the performance tests.

- (b) A startup, shutdown, and malfunction plan, as described in §63.6(e)(3) of the general provisions in subpart A of this part, that contains specific procedures for operating and maintaining the source during periods of startup, shutdown, and malfunction and a program of corrective action for malfunctioning process and control systems used to comply with the emission standards. In addition to the information required by §63.6(e)(3), your plan must include the following:
 - (1) Procedures to determine and record what caused the malfunction and when it began and ended.
 - (2) Corrective actions you will take if a process or control device malfunctions, including procedures for recording the actions taken to correct the malfunction or minimize emissions.
 - (3) An inspection and maintenance schedule for each process and control device that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.
- (c) A report of each event as required by §63.10(b) of the general provisions in subpart A of this part, including a report if an action taken during a startup, shutdown, or malfunction is inconsistent with the procedures in the plan as described in §63.6(e)(3) of the general provisions in subpart A of this part.
- (d) An operations, maintenance, and monitoring plan as specified in §63.1187 of this subpart.
- (e) A semiannual report as required by §63.10(e)(3) of the general provisions in subpart A of this part if measured emissions exceed the applicable standard or a monitored parameter varies from the level established during performance testing. The report must contain the information specified in §63.10(c) of the general provisions, as well as the relevant records required by §63.1192(b) of this subpart.

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<p>(f) A semiannual report stating that no excess emissions or deviations of monitored parameters occurred during the reporting period as required by §63.10(e)(3)(v) of the general provisions in subpart A of this part if no deviations have occurred.</p> <p>7. Semi-annual monitoring report required by 40 CFR 63 Subpart DDD shall be submitted to the Department according the following schedule:</p>	<p>ADEM Admin. Code R. 335-3-11-.06(1) [§63.10(a)(5)]</p>						
<table border="1"> <thead> <tr> <th data-bbox="131 596 630 667">Reporting Period</th><th data-bbox="630 596 1122 667">Due Date</th></tr> </thead> <tbody> <tr> <td data-bbox="131 667 630 730"><i>April 1st to September 30^h</i></td><td data-bbox="630 667 1122 730"><i>November 30th</i></td></tr> <tr> <td data-bbox="131 730 630 798"><i>October 1st to March 31st</i></td><td data-bbox="630 730 1122 798"><i>May 30th</i></td></tr> </tbody> </table>	Reporting Period	Due Date	<i>April 1st to September 30^h</i>	<i>November 30th</i>	<i>October 1st to March 31st</i>	<i>May 30th</i>	
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<i>October 1st to March 31st</i>	<i>May 30th</i>						

Summary Page for Mineral Wool Process – Eight (8) Pipe Insulation Lines

Permitted

Operating Schedule: 24 Hrs/day x 7 Days/week x 52 Weeks/yr = 8760 Hrs/yr

Emission limitations:

Emission Point #	Description	Pollutant	Emission limit	Regulation
Stack 102	Filterhouse #2 and #3 controlling Lines D-3, SB-1, MK-2, A-1, B-1, D-1, B-2, and B-3	PM	117 lb/hr*	335-3-14-.04(9) BACT
Stack 102	Filterhouse #2 and #3 controlling Lines D-3, SB-1, MK-2, A-1, B-1, D-1, B-2, and B-3	Formaldehyde	0.06 lb/ton of melt	§63.1179(a) Subpart DDD

* combined particulate matter (PM) emissions from the Cupola, Fiber Formation/Collection Process, Mineral Wool Process (Board Line), and Mineral Wool Process (Pipe Insulation Line)

Provisos for Mineral Wool Process – Eight (8) Pipe Insulation Lines

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<p><u>Applicability</u></p> <ol style="list-style-type: none"> 1. This source is subject to the applicable requirements of ADEM Admin. Code R. 335-3-16-.03, <i>“Major Source Operating Permits”</i>. 2. This process is subject to ADEM Admin. Code R. 335-3-4-.01(1), <i>“Control of Particulate Emissions – Visible Emissions”</i>. 3. This process has enforceable limits in place in order to comply with the applicable provisions of ADEM Admin. Code R. 335-3-14-.04, <i>“Air Permits Authorizing Construction in Clean Air Areas [Prevention of Significant Deterioration]”</i>. 4. A mineral wool production facility is subject to the applicable provisions of 40 CFR 63 Subpart DDD, <i>“National Emission Standards for Hazardous Air Pollutants for Mineral Wool Production”</i>. 5. A mineral wool production facility is subject to the applicable provisions of 40 CFR 63 Subpart A, <i>“General Provisions”</i> as listed in Table 1 of 40 CFR 63 Subpart DDD. 	<p>ADEM Admin. Code R. 335-3-16-.03</p> <p>ADEM Admin. Code R. 335-3-4-.01(1)</p> <p>ADEM Admin. Code R. 335-3-14-.04</p> <p>40 CFR 63 Subpart DDD</p> <p>40 CFR 63 Subpart DDD</p>
<p><u>Emission Standards</u></p> <ol style="list-style-type: none"> 1. Visible emissions (VE) these units shall not exceed the opacity limitations as specified in General Proviso No. 29. 2. The combined particulate matter (PM) emissions from the Cupola, Fiber Formation/Collection Process, Mineral Wool Process (Board Line), and Mineral Wool Process (Pipe Insulation Line) shall not exceed 117.0 (lb/hr) pounds per hour. 3. The facility must control emissions from each existing, new, or reconstructed curing oven by limiting emissions of formaldehyde to either of the following: <ol style="list-style-type: none"> (a) 0.03 kg of formaldehyde per MG (0.06 lb of formaldehyde per ton) of melt or less. (b) A reduction of uncontrolled formaldehyde emissions by at least 80 percent. 4. The baghouse shall not be bypassed during startup or for more than four (4) hours during shutdown periods. 	<p>ADEM Admin. Code R. 335-3-4-.01(1)</p> <p>ADEM Admin. Code R. 335-3-14-.04(9)</p> <p>ADEM Admin. Code R. 335-3-11-.06(55) [§63.1179(a)]</p> <p>ADEM Admin. Code R. 335-3-14-.04(9)</p>

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<ol style="list-style-type: none"> 5. The pressure drop across each baghouse shall not drop below 0.2 inches W. C. while the source of pollution to the baghouse is operating. 6. Maintain the free-formaldehyde content of each resin lot and the formaldehyde content of each binder formulation at or below the specification ranges of the resin and binder used during the performance test. 7. The Permittee must comply with these standards (Subpart DDD) at all times except during periods of startup, shutdown, or malfunction. 	<p>ADEM Admin. Code 335-3-14-.04(9)</p> <p>ADEM Admin. Code R. 335-3-11-.06(55) [§63.1179(b)(1)]</p> <p>ADEM Admin. Code R. 335-3-11-.06(55) [§63.1180]</p>
<u>Compliance and Performance Test Methods and Procedures</u>	
<ol style="list-style-type: none"> 1. If testing is required, particulate matter emissions shall be determined by Method 5e of 40 CFR Part 60, Appendix A. 2. To comply with the formaldehyde standards, the facility must meet all of the following: <ol style="list-style-type: none"> (a) Install, calibrate, maintain, and operate a device that continuously measures the operating temperature in the firebox of each thermal incinerator. (b) Do a performance test as specified in §63.1188 of this subpart while manufacturing the product that requires a binder formulation made with the resin containing the highest free-formaldehyde content specification range. Show compliance with the formaldehyde emission limits while the device for measuring incinerator operating temperature is installed, operational, and properly calibrated. Establish the average operating temperature as specified in §63.1185(a) of this subpart. (c) During the performance test that uses the binder formulation made with the resin containing the highest free-formaldehyde content specification range, record the free-formaldehyde content specification range of the resin used, and the formulation of the binder used, including the formaldehyde content and binder specification. (d) Following the performance test, monitor and record the free-formaldehyde content of each resin lot and the formulation of each batch of binder used, including the formaldehyde content. (e) Maintain the free-formaldehyde content of each resin lot and the formaldehyde content of each binder formulation 	<p>ADEM Admin. Code R. 335-3-1-.05</p> <p>ADEM Admin. Code R. 335-3-11-.06(55) [§63.1183]</p>

Federally Enforceable Provisos	Regulations
<p>at or below the specification ranges established during the performance test.</p> <ul style="list-style-type: none"> (f) Following the performance test, measure and record the average operating temperature of the incinerator as specified in §63.1185(b) of this subpart. (g) Maintain the operating temperature of the incinerator so that the average operating temperature for each three-hour block period never falls below the average temperature established during the performance test. (h) Operate and maintain the incinerator as specified in your operations, maintenance, and monitoring plan required by §63.1187 of this subpart. (i) With prior approval from the Administrator, the facility may do short-term experimental production runs using resin where the free-formaldehyde content, or binder formulations where the formaldehyde content, is higher than the specification ranges of the resin and binder used during previous performance tests, or using experimental pollution prevention process modifications without first doing additional performance tests. Notification of intent to perform a short-term experimental production run must include the following information: <ul style="list-style-type: none"> (1) The purpose of the experimental run. (2) The affected production process. (3) How the resin free-formaldehyde content or binder formulation will deviate from previously approved levels or what the experimental pollution prevention process modifications are. (4) The duration of the experimental run. (5) The date and time of the experimental run. (6) A description of any emissions testing to be done during the experimental run. <p>3. The performance tests conducted to demonstrate compliance with the emissions limits in §63.1178 shall conform to the test methods and procedures specified in §63.1188 and §63.1189.</p>	<p>ADEM Admin. Code R. 335-3-11-.06(55) [§63.1188-1189]</p>

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<p>4. Using the results of the performance tests, the facility must use the following equation to determine compliance with the formaldehyde numerical emission limits:</p> $E = \frac{C \times MW \times O \times K_1 \times K_2}{K_3 \times P \times 10^6}$ <p>where:</p> <p>E = Emission rate of measured pollutant, kg/Mg (lb/ton) of melt.</p> <p>C = Measured volume fraction of pollutant, ppm.</p> <p>MW = Molecular weight of measured pollutant, g/g-mole:</p> <p>Formaldehyde = 30.03.</p> <p>Q = Volumetric flow rate of exhaust gases, dscm/hr (dscf/hr).</p> <p>K₁ = Conversion factor, 1 kg/1,000 g (1 lb/453.6 g).</p> <p>K₂ = Conversion factor, 1,000 L/m³ (28.3 L/ft³).</p> <p>K₃ = Conversion factor, 24.45 L/g-mole.</p> <p>P = Average melt rate, Mg/hr (ton/hr).</p>	<p>ADEM Admin. Code R. 335-3-11-.06(55) [§63.1190]</p>
<p><u>Emission Monitoring</u></p> <ol style="list-style-type: none"> 1. Instruments which measure the pressure drop across the filterhouses shall be maintained and operated. 2. During the annual compliance test, minimum pressure drops shall be determined for the filterhouses. 3. Pressure drop across each filterhouse shall be monitored and recorded daily, except when the source of pollution to the filterhouse is not being operated. 4. Particulate matter emissions tests are to be conducted at intervals not to exceed one year following the date of initial compliance testing. All test reports must be submitted to the Department within 15 days of completion of testing. 	<p>ADEM Admin. Code 335-3-1-.04</p> <p>ADEM Admin. Code 335-3-1-.04</p> <p>ADEM Admin. Code 335-3-1-.04</p> <p>ADEM Admin. Code 335-3-1-.04</p>

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<p>5. The operations, maintenance, and monitoring plan must include the following:</p> <ul style="list-style-type: none"> (a) Process and control device parameters you will monitor to determine compliance, along with established operating levels or ranges for each process or control device. (b) A monitoring schedule. (c) Procedures for properly operating and maintaining control devices used to meet the standards in §§63.1178 and 63.1179 of this subpart. These procedures must include an inspection of each incinerator at least once per year. At a minimum, you must do the following as part of an incinerator inspection: <ul style="list-style-type: none"> (1) Inspect all burners, pilot assemblies, and pilot sensing devices for proper operation. Clean pilot sensor if necessary. (2) Ensure proper adjustment of combustion air, and adjust if necessary. (3) Inspect, when possible, all internal structures (such as baffles) to ensure structural integrity per the design specifications. (4) Inspect dampers, fans, and blowers for proper operation. (5) Inspect motors for proper operation. (6) Inspect, when possible, combustion chamber refractory lining. Clean, and repair or replace lining if necessary. (7) Inspect incinerator shell for proper sealing, corrosion, and/or hot spots. (8) For the burn cycle that follows the inspection, document that the incinerator is operating properly and make any necessary adjustments. (9) Generally observe whether the equipment is maintained in good operating condition. (10) Complete all necessary repairs as soon as practicable. 	<p>ADEM Admin. Code R. 335-3-11-.06 (55)</p> <p>[§63.1187(b)]</p>

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<p>(d) Procedures for keeping records to document compliance.</p> <p>(e) Corrective actions you will take if process or control device parameters vary from the levels established during performance testing.</p>							
<p><u>Recordkeeping and Reporting Requirements</u></p>							
<p>1. A semi-annual monitoring report shall be submitted to the Department according the following schedule:</p>	<p>ADEM Admin. Code R. 335-3-16-.05(c)3.</p>						
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<i>April 1st to September 30^h</i>	<i>November 30th</i>						
<i>October 1st to March 31st</i>	<i>May 30th</i>						
<p>2. A report shall be submitted semi-annually which contains the following:</p> <p>(a) The periods when the pressure drops across the filterhouses were below the allowable minimum pressure;</p>	<p>ADEM Admin. Code R. 335-3-16-.05(c)3.</p>						
<p>3. All records shall be maintained for a minimum of 5 years.</p>	<p>ADEM Admin. Code R. 335-3-16-.05 (c)3.</p>						
<p>4. This source shall comply with the notification requirements specified in 63.1191.</p>	<p>ADEM Admin. Code R. 335-3-11-.06 (55) [§63.1191]</p>						
<p>5. The facility must meet the following recordkeeping requirements:</p> <p>(a) Maintain files of all information required by §63.10(b) of the general provisions in subpart A of this part, including all notifications and reports.</p> <p>(b) Maintain records of the following information also:</p> <p>(1) All bag leak detection system alarms. Include the date and time of the alarm, when corrective actions were initiated, the cause of the alarm, an explanation of the corrective actions taken, and when the cause of the alarm was corrected.</p> <p>(2) The free-formaldehyde content of each resin lot and the binder formulation, including formaldehyde content, of each binder batch used in the manufacture</p>	<p>ADEM Admin. Code R. 335-3-11-.06 (55) [§63.1192]</p>						

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of bonded products.

- (c) Retain each record for at least five years following the date of each occurrence, measurement, corrective action, maintenance, record, or report. The most recent two years of records must be retained at the facility. The remaining three years of records may be retained off site.
 - (d) Retain records on microfilm, on a computer, on computer disks, on magnetic tape disks, or on microfiche.
 - (e) Report the required information on paper or on a labeled computer disk using commonly available and compatible computer software.
6. The facility must prepare and submit reports to the Administrator as required by subpart DDD and §63.10 of the general provisions in subpart A of this part. These reports include, but not limited to, the following:
- (a) A performance test report, as required by §63.10(d)(2) of the general provisions in subpart A of this part, that documents the process and control equipment operating parameters during the test period, the test methods and procedures, the analytical procedures, all calculations, and the results of the performance tests.
 - (b) A startup, shutdown, and malfunction plan, as described in §63.6(e)(3) of the general provisions in subpart A of this part, that contains specific procedures for operating and maintaining the source during periods of startup, shutdown, and malfunction and a program of corrective action for malfunctioning process and control systems used to comply with the emission standards. In addition to the information required by §63.6(e)(3), your plan must include the following:
 - (1) Procedures to determine and record what caused the malfunction and when it began and ended.
 - (2) Corrective actions you will take if a process or control device malfunctions, including procedures for recording the actions taken to correct the malfunction or minimize emissions.
 - (3) An inspection and maintenance schedule for each process and control device that is consistent with the manufacturer's instructions and recommendations for

ADEM Admin. Code R.
335-3-11-.06 (55)
[§63.1193]

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routine and long-term maintenance.

- (c) A report of each event as required by §63.10(b) of the general provisions in subpart A of this part, including a report if an action taken during a startup, shutdown, or malfunction is inconsistent with the procedures in the plan as described in §63.6(e)(3) of the general provisions in subpart A of this part.
- (d) An operations, maintenance, and monitoring plan as specified in §63.1187 of this subpart.
- (e) A semiannual report as required by §63.10(e)(3) of the general provisions in subpart A of this part if measured emissions exceed the applicable standard or a monitored parameter varies from the level established during performance testing. The report must contain the information specified in §63.10(c) of the general provisions, as well as the relevant records required by §63.1192(b) of this subpart.
- (f) A semiannual report stating that no excess emissions or deviations of monitored parameters occurred during the reporting period as required by §63.10(e)(3)(v) of the general provisions in subpart A of this part if no deviations have occurred.

7. Semi-annual monitoring report required by 40 CFR 63 Subpart DDD shall be submitted to the Department according the following schedule:

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[§63.10(a)(5)]

Reporting Period	Due Date
<i>April 1st to September 30^h</i>	<i>November 30th</i>
<i>October 1st to March 31st</i>	<i>May 30th</i>

APPENDIX A

40 CFR 64

Compliance Assurance Monitoring (CAM)

MONITORING APPROACH: Cupola Gas-fired Incinerator

	Indicator No. 1	Indicator No. 2
I. Indicator	Cupola Incinerator Temperature	Inspection and Maintenance Provisions
Measurement Approach	Cupola incinerator temperature will be monitored continuously when the cupola is in operation.	Follow procedures in section 63.1187(b)(3) of 40 CFR 63 Subpart DDD
II. Indicator Range	Cupola incinerator temperature will be maintained at or above 1320°F while the cupola is in operation (excludes startup and shutdown).	Follow procedures in section 63.1187(b)(3) of 40 CFR 63 Subpart DDD
III. Performance Criteria Data Representativeness	Cupola incinerator temperature will be monitored with a temperature indicating device installed in the combustion chamber of the incinerator, providing directly representative data.	Follow procedures in section 63.1187(b)(3) of 40 CFR 63 Subpart DDD
Verification of Operation Status	When operational, cupola incinerator temperature indicator will display the incinerator temperature.	Documented completion of inspection and maintenance activities in accordance with section 63.1187(b)(3) of 40 CFR 63 Subpart DDD
QA/QC Practices and Criteria	Cupola incinerator temperature will be automatically recorded.	Persons performing the inspection and maintenance will be trained in proper techniques and provided the proper background to effectively perform the inspection and maintenance
Monitoring Frequency	Cupola incinerator temperature is monitored continuously.	At least once per year
Data Collection Procedures	Automatic.	Records of completions of inspection and maintenance
Averaging period	3-hour average	N/A